AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings of claims in the application:

Claim 1 (Currently Amended): A process for producing foamable crosslinked polymers, comprising:

polymerizing a mixture comprising

(A) 30-70 parts by weight of (meth)acrylic acid,

30-60 parts by weight of (meth)acrylonitrile,

0-30 parts by weight of other monomers having vinyl unsaturation,

(B) 0.01-15 parts by weight of tert-butyl methacrylate and/or tert-butyl acrylate,

(C) 0.01-10 parts by weight of blowing agent,

(D) 0.01-10 parts by weight of crosslinking agent,

(E) 0.01 to 2 parts by weight of polymerization initiators and

(F) 0 to 20 parts by weight of conventional additives

in bulk to give a sheet;

wherein said sheet [[which]] is optionally subjected to the following treatment:

heat-conditioning ~~conditioned~~ and then ~~is foamed~~ foaming at temperatures of from 150 to 250°C.

Claim 2 (Previously Presented): The process for producing foamable crosslinked polymers according to Claim 1, wherein 0.01-4.99 parts by weight of tert-butyl methacrylate and/or tert-butyl acrylate are used.

Claim 3 (Currently Amended): A foamable crosslinked polymer comprising

(A) 30-70 parts by weight of (meth)acrylic acid,

30-60 parts by weight of (meth)acrylonitrile,

0-30 parts by weight of other monomers having vinyl unsaturation,

(B) 0.01-15 parts by weight of tert-butyl methacrylate and/or tert-butyl acrylate,

(C) 0.01-10 parts by weight of blowing agent,

(D) 0.01-10 parts by weight of crosslinking agent,

(E) 0.01 to 2 parts by weight of polymerization initiators and

(F) 0 to 20 parts by weight of conventional additives.

Claim 4 (Previously Presented): The foamable crosslinked polymer according to Claim 3, wherein the polymer comprises 0.01-4.99 parts by weight of tert-butyl methacrylate and/or tert-butyl acrylate.

Claim 5 (Previously Presented): A poly(meth)acrylimide foam, wherein the poly(meth)acrylimide foam is obtained via foaming of polymer according to the process of Claim 1.

Claim 6 (Previously Presented): A laminated material comprising a layer of a poly(meth)acrylimide foam according to Claim 5.

Claim 7 (Currently Amended): A vehicle, comprising:

~~motor vehicle, a rail vehicle, a watercraft, an aircraft or a spacecraft comprising~~ the poly(meth)acrylimide foam according to Claim 5;

wherein said vehicle is selected from the group consisting of a motor vehicle, a rail vehicle, a watercraft, an aircraft or a spacecraft.

Claim 8 (Previously Presented): A machine component comprising the poly(meth)acrylimide foam according to Claim 5.

Claim 9 (Previously Presented): An antenna comprising the poly(meth)acrylimide foam according to Claim 5.

Claim 10 (Previously Presented): An X-ray table comprising the poly(meth)acrylimide foam according to Claim 5.

Claim 11 (Previously Presented): A load speaker comprising the poly(meth)acrylimide foam according to Claim 5.

Claim 12 (Previously Presented): A pipe comprising the poly(meth)acrylimide foam according to Claim 5.

Claim 13 (New): The process for producing foamable crosslinked polymers according to Claim 1, wherein said sheet is heat-conditioned and foamed.

Claim 14 (New): A process for producing foamable crosslinked polymers, comprising:

polymerizing a mixture comprising

(A) 30-70 parts by weight of (meth)acrylic acid,

30-60 parts by weight of (meth)acrylonitrile,

0-30 parts by weight of other monomers having vinyl unsaturation,

(B) 0.01-15 parts by weight of tert-butyl methacrylate,

(C) 0.01-10 parts by weight of blowing agent,

(D) 0.01-10 parts by weight of crosslinking agent,

(E) 0.01 to 2 parts by weight of polymerization initiators and

(F) 0 to 20 parts by weight of conventional additives

in bulk to give a sheet;

wherein said sheet is optionally subjected to the following treatment:

heat-conditioning and then foaming at temperatures of from 150 to 250°C.

Claim 15 (New): A foamable crosslinked polymer comprising

(A) 30-70 parts by weight of (meth)acrylic acid,

30-60 parts by weight of (meth)acrylonitrile,

0-30 parts by weight of other monomers having vinyl unsaturation,

(B) 0.01-15 parts by weight of tert-butyl methacrylate,

(C) 0.01-10 parts by weight of blowing agent,

(D) 0.01-10 parts by weight of crosslinking agent,

(E) 0.01 to 2 parts by weight of polymerization initiators and

(F) 0 to 20 parts by weight of conventional additives.